

REMARKS

This communication is in response to the Action of April 7, 1998. In that Action, claims 2 through 7, 16, 21 and 23 through 38 were rejected.

The applicant has amended claims 16, 21 and 32 to clarify them. Further, the applicant has added ten claims to more fully claim the present invention.

The Examiner first indicates that the sequence of copending applications preceding the current application on page 1 thereof at line 1 needs to be updated. The applicant has done so in the above amendment.

The Examiner next rejects claims 2 through 7, 16, 21 and 23 through 38 under the judicially created doctrine of double patenting with respect to U.S. Patents 5,533,503 to Doubek et al.; 5,533,499 to Johnson; 5,549,103 to Johnson; and 5,476,091 to Johnson. The applicant has included a Terminal Disclaimer herewith to overcome this rejection.

The Examiner next rejects claim 32 under 35 U.S.C. 112 as being indefinite in finding the last paragraph does not make sense for stating that the adhesive void both does and does not contact the bridge of a wearer's nose. The applicant believes this rejection has been overcome by the above amendment.

The Examiner next rejects claims 2, 4 through 7, 16, 21, 28, 29 and 36 under 35 U.S.C. 102 as being anticipated by Spanish Utility Model 289561. The Examiner appears to contend that the elements of these rejected claims are found entirely within the Spanish reference. With this contention, the applicant respectfully disagrees.

Independent claims 2, 16, 21 and 36 each require that the flexible strip of material recited therein be positioned between the resilient member and the outer wall tissues of a user's nose. This strip, so positioned, will then provide a deformable body beneath the resilient member to reduce stress concentrations on the nose of the user due to that resilient member. Also, this deformable body under the resilient member provides a layer of a material differing from that used for the member. This arrangement allows for a wider choice of materials to be placed against the user's skin to better enable finding a material more compatible therewith than the material of the resilient member. The

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wider choice follows because the material choice for this flexible strip is not limited by the material also being required to provide a spring force, as that force is supplied by the resilient member positioned thereover.

A review of Figures 2 and 3 in the Spanish reference clearly shows that the "sticking plaster" disclosed therein is, in every instance, on the outside of the "elastic strip" described therein, that is, this spring-like strip is between the "sticking plaster" material and the outer wall tissues of a user's nose in direct contrast to what is claimed in the present application. As a result, the Spanish reference provides a nasal dilator without any stress relief layer between the elastic member spring therein and the outer wall tissues of the user's nose. Instead, a solid spring-like material is positioned against the user's skin which is not likely to be as compatible with that skin as other materials not restricted to also having to provide a springing force.

Clearly, nothing in the Spanish reference discloses the claimed nasal dilator structure set forth in these rejected claims of a flexible strip positioned between the resilient member and the user's skin during use. Therefore, these independent claims should be allowable over that reference as well as claims 4 through 7 dependent on claim 2.

Claim 28 requires the intermediate segment to be narrowed with respect to the widths of the end surfaces. This arrangement provides two benefits, the first of which is that the narrowed intermediate region either aids the provision of, or to a limited extent supplies, a partial adhesive void in that region adjacent to the outer wall tissues of the bridge of a user's nose. That is, this construction forms an effective void and aids in preventing excessive moisture accumulation in the skin on the bridge of the user's nose which can lead to skin maceration.

In addition, such a void averts having an adhesive, otherwise provided there in the absence of such narrowing, from bonding to more of the nasal bridge tissues. These nasal bridge tissues are more easily irritated by stretching than are other portions of the nasal outer wall tissues, and such added irritation resulting from the stretching that occurs during manual removal of the dilator absent such narrowing can make that removal more difficult and possibly painful.

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Again, a review of Figures 1, 2 and 3 of the Spanish reference clearly shows that the intermediate segment between the ends thereof is in no instance shown narrowed with respect to the widths of those ends. Clearly, the Spanish reference again does not disclose what is claimed in claim 28 and so that claim should be allowable thereover along with claim 29 dependent thereon.

The Examiner next rejects claim 3, 24, 25, 31 through 33 and 38 under 35 U.S.C. 103 as being unpatentable over the Spanish reference taken in view of U. S. Patent 1,292,083 to Sawyer. The Examiner appears to contend that the nasal dilator of the Spanish reference, having adhesive causing it to stick to the bridge of the user's nose, could be modified to omit adhesive at that location in view of the Sawyer reference not having adhesive in the spring wire therein that is positioned over the bridge of the nose. With this contention, the applicant must again respectfully disagree.

The Spanish reference and the present invention both involve nasal dilators having lengths such that installing the intermediate portion of a dilator to be in contact with the bridge of a user's nose allows the end portions thereof to reach the proper positions therefor on the opposite sides of the nose to there engage the nasal outer wall tissues. Thus, a user will very typically place the intermediate portion of the dilator on the bridge of the user's nose to begin installation of the dilator, and thereafter force the portions of the dilator downward to contact the sides of the nose leaving the entire inside surface of the dilator in contact with the nasal outer wall tissues. When these end portions are in the resulting proper positions, the dilators will provide suitable dilation of the nasal passageway due to the outward spring force on those outer wall tissues contacted and engaged by these end regions.

The nasal dilator of the Sawyer reference, on the other hand, has a spring wire connecting two pads that are each, separately and independently, adhered to the user's nose. Such an unconstrained installation process results in these pads being subject to some degree of misplacement relative to one another, and relative to the proper positions on that nose, as there is no limitation on the position of one pad with respect to the other except the user's installation skill or good fortune. As a result, the spring wire of the Sawyer nasal dilator must be adjustable both to take into account variations in positioning of the pads adhered to the sides of the user's nose, and to

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provide an acceptable outward force on those pads. Such an adjustment for spring wire force value, by adjusting the wire bend arc beyond its elastic yield point inwardly or outwardly, is needed since every change in separation of the spring wire legs to accommodate a pad misplacement yields a different force value in the outward direction on those pads when the wire legs are subsequently hooked thereto.

Because the spring wire must conform fairly close to a user's nose during use to reduce the risk of it becoming unhooked from the pads, it must also be removable from the spring pads after they have been placed on the user's nose to permit such inelastic bending adjustments to be made in the degree of arc occurring in the bending arc of that wire. However, both for purposes of removal and reinstallation, and to provide enough space to allow the bending arc of that wire to be adjusted, the spring wire cannot be tightly conformed against the user's nose in a straight path between the two pads adhered to the sides of that nose.

Thus, the Sawyer reference use of a spring wire in the nasal dilator disclosed therein without any adhesive on it teaches one skilled in the art nothing about the desirability of having, or of not having, an adhesive on the intermediate segment of the Spanish reference dilator because there is no such choice available for the Sawyer reference dilator. As the spring wire in the Sawyer reference dilator is to be both readily removable and spaced apart from that nose, there will clearly not be any adhesive provided on it which, if present, could only interfere with spring removability if the spring could be used positioned fully against the nose. Since, however, the spring is to be spaced apart from the user's nose, putting adhesive on it would not only be pointless for adherence but also can not have any effect on the user's comfort. Thus, the Sawyer reference teaches nothing of increasing the user's comfort by the absence of adhesive on the spring wire therein, and so cannot suggest such a comfort increase in removing adhesive from the Spanish reference dilator.

Furthermore, the Spanish reference specifically states that the nasal dilator disclosed therein sticks to the top of the user's nose. Thus, not only would one skilled in the art find the Sawyer's absence of adhesive on the spring wire irrelevant with respect to the Spanish reference nasal dilator, any such interpretation of the Sawyer reference as teaching the absence of adhesive in an

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intermediate segment could only be combined with the Spanish reference nasal dilator by directly contradicting what is stated in the Spanish reference.

In such circumstances, independent claims 3 and 32 should be allowable as should the claims dependent thereon. Similarly, claims 31 and 38 should also be allowable in their own right as well as being allowable in depending on claims 28 and 36 demonstrated to be allowable above.

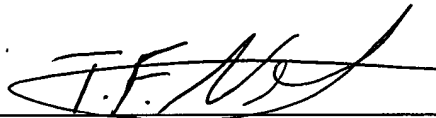
In view of the foregoing, the applicant respectfully requests the Examiner to reconsider her rejection of the claims, and further requests these claims now be allowed as amended along with the claims added thereto.

Any inquiries regarding this application should be directed to Theodore F. Neils at (612) 339-1863.

Respectfully submitted,

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